

Amendments to the Specification:

Please replace the paragraph beginning on page 1, at line 10, with the following rewritten paragraph:

--Conventional methods of generating panoramic images comprising a wide field of view of a scene from a plurality of images generally include the following steps: (1) an image capture step, where the plurality of images of a scene are captured with overlapping pixel regions; (2) an image warping step, where the captured images are geometrically warped onto a cylinder, sphere, or any environment map; (3) an image registration step, where the warped images are aligned; and (4) a blending step, where the aligned warped images are blended together to form the panoramic image. For an example of an imaging system that generates panoramic images, see May et al. ~~USN 09/224,547 filed December 31, 1998~~ U.S. Patent No. 6,714,249, issued March 30, 2004.--

Please replace the paragraph beginning on page 2, at line 11, with the following rewritten paragraph:

--Gallagher et al. ~~in USN 09/293,197 filed April 16, 1999~~ U.S. Patent No. 6,670,988, issued December 30, 2003 describe a variety of methods of selecting the parameter used to generate the falloff compensation mask. For example, in this conventional teaching the parameter could be selected in order to simulate the level of falloff compensation that is naturally performed by the lens of the optical printer. Additionally, the parameter could be determined interactively by an operator using a graphical user interface (GUI), or the parameter could be dependent upon the film format (APS or SUC) or the sensor size. Finally, they teach a simple automatic method of determining the parameter.--

Please replace the paragraph beginning on page 2, at line 20, with the following rewritten paragraph:

--Gallagher ~~in USN 09/626,882 filed July 27, 2000~~ et al. U.S. Patent No. 6,941,027, issued September 6, 2005 describes a method of automatically determining a level of light falloff in an image. This method does not misinterpret image discontinuities as being caused by light falloff, as frequently happens in the other methods.--

Please replace the paragraph beginning on page 6, at line 25, with the following rewritten paragraph:

--Referring next to Fig. 5B, in one embodiment, the step of applying the metric transform **504** includes applying a matrix transformation **508** and a gamma compensation lookup table **510**. In one example of such an embodiment, a source digital image **500** was provided from a digital camera, and contains pixel values in the sRGB color space. A metric transform **502** is used to convert the pixel values into nonlinearly encoded Extended Reference Input Medium Metric (ERIMM) (PIMA standard #7466, found on the World Wide Web at <http://www.pima.net/standards/it10/IT10-POW.htm> ~~www.pima.net/standards/it10/IT10-POW.htm~~), so that the pixel values are logarithmically related to scene intensity values.--

Please replace the paragraph beginning on page 9, at line 26, with the following rewritten paragraph:

--In some instances, the overall exposure level of each source digital image **700** and **702** can differ. In these cases, the light falloff and the factor describing the overall difference in exposure levels can be simultaneously determined automatically without the knowledge of the focal length; however, two distinct points in the overlapping pixel region **704** are required. Copending USSN _____ (E.K. Docket ~~83516/THC~~) 10/008,026 filed by Cahill et al. November 5, 2001, details a technique for automatically determining the factor describing overall difference in exposure levels between multiple images, but that technique may not be robust if there is any significant falloff on at least one of the source images. Consider that the exposure value recorded at the i^{th} point in the overlapping pixel region of source digital image **700** is I_i' , and the exposure value recorded at the corresponding point of source digital image **702** is I_i'' , and that $i \geq 2$. Then, the following relation must hold:

$$\frac{I_i''}{\cos^4\left(\tan^{-1}\left(f^{-1}\sqrt{x_i^2 + y_i^2}\right)\right)} = \frac{hI_i'}{\cos^4\left(\tan^{-1}\left(f^{-1}\sqrt{u_i^2 + v_i^2}\right)\right)},$$

for $i = 1 \dots n$, where h is the factor describing the overall difference in exposure levels. Since I_i' , I_i'' , u_i , v_i , x_i , and y_i are known, the focal length f and the exposure factor h can be found by minimizing some error measure. A typical error measure is sum of squared errors (SSE). Using SSE, the following function would be minimized:

$$r(f, h) = \sum_{i=1}^n \left[I_i'' \cos^4 \left(\tan^{-1} \left(f^{-1} \sqrt{u_i^2 + v_i^2} \right) \right) - h I_i' \cos^4 \left(\tan^{-1} \left(f^{-1} \sqrt{x_i^2 + y_i^2} \right) \right) \right]^2 .$$

The minimum of $r(f, h)$ can be found by one of a variety of different nonlinear least squares techniques, for example, the aforementioned Levenberg-Marquardt methods.--